

SCIENTIFIC INQUIRY PROJECT

SCINQ - What is it?

The SCINQ is a fast and furious way to to unpack the essential nature of research. It is an opportunity to dig deep into a topic you know little or nothing about and present to your cohort the most interesting or important aspect that you uncover through your own unique analysis.

You will have three weeks to create an effective presentation on this research topic. Presentations on those topics will begin exactly one week later(5/16). Presentations can be no longer than six slides/six minutes. You will have class time to work on this project. Every presentation must be accompanied by a “3What” analysis of no more than two pages in length.

PURPOSE:

1. Present a creative, thoughtful, and critical analysis, via a slide presentation, of your topic. You must examine, review, and evaluate the scholarship.* Create an interesting (and somewhat unique) POINT to your research. “Essentialize” the data.
2. Uncover new and exciting information for present and future GNRGs.

DO:

As Spike Lee said, “Mo better, is mo better.” This is a good rule of thumb for research (not so for presentations nor for writing).

Be exhaustive in your research. Be selective and concise in presenting the information. Cite and document everything.

DO NOT:

Regurgitate (aka plagiarize) facts. We are interested in your insights. If your presentation deals with the facts that we could find on wikipedia, then do not bother presenting.

AUDIENCE:

GNRG faculty and GNRG peers

*(Scholarship = better because it is peer reviewed. “Jimbo’s House-O-Research.com” is not an acceptable source of critical research)

STEP ONE

Determine your PURPOSE (Choose one of the following)

- Analysis/Examination requires a look at an issue in detail, explaining how it evolved, who/what it affects, and what is at stake
- Review of Scholarship requires summaries of what key scholars and researchers have written about the issue
- Survey requires you to gather opinion about particular issue.
- Evaluation requires you to make critical judgments
- Argument requires you to assemble evidence in support of claim you make.

STEP TWO

Identify Audience - Think about for whom you are writing

- How familiar are your readers with subject? What do they know/not know?
- What aspects of your subject will interest them? What background info do you need to provide?
- What are the preconceived ideas/beliefs your readers might have on your subject?
- Do you want to inform, change, or persuade your readers?

STEP THREE

Think about Project's Length and Scope

- What kind of research – library, survey, fieldwork ?
- How long? How many sources?
- What are the outcomes – short paper and Presentation

STEP FOUR

Prepare BIG 3 (TOPIC, QUESTION, THESIS)

example #1 (Chemical example)

TOPIC: (Chemical properties of grease:)

RESEARCHABLE QUESTION: (Why does it refuse to leave a surface?)

WORKING THESIS: (Grease is sticky based on two characteristics: Its viscosity and its hydrophobic tendencies)

example #2 (Mechanical example)

TOPIC: (Centrifuge)

RESEARCHABLE QUESTION: (How does filtering (grease or algae) via centrifuge affect production?)

WORKING THESIS: (The use of a centrifuge in biodiesel production may enhance the process, but factors such as the extra energy used for filtering may reduce the cost/benefit ratio.)

example #3 (Economic example)

TOPIC: (Economic impacts of the GREEN movement)

RESEARCHABLE QUESTION: (How has the presence of a Green Economy affected local and global industries?)

WORKING THESIS: (The economic impact of the Green movement is tremendous, but mixed, with some industries benefiting and others struggling.)